TABLE 46

Domestic R&D paid for by the company's foreign subsidiaries and performed by the company, by type of R&D, industry, and company size: 2018 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total ^a	Basic research ^b	Applied research ^b	Development ^l
All industries	21-23, 31-33, 42-81	23,515	553	2,330	20,632
Manufacturing industries	31-33	16,101	437	1,691	13,972
Food	311	82	i 7 i	2 i	72
Beverage and tobacco products	312	11	1	4	7
Textile, apparel, and leather products	313-16	1	0	0	1
Wood products	321	0	0	0	0
Printing and related support activities	323	0	0	0	0
Chemicals	325	2,697	321	367	2,009
Pharmaceuticals and medicines	3254	2,640	314	351	1,976
Other chemicals	other 325	56	7	15	33
Plastics and rubber products	326	38	3 i	8 i	28
Nonmetallic mineral products	327	11	*	5	6
Primary metals	331	3	*	1	2
Fabricated metal products	332	3	*	*	3
Machinery	333	127	3 i	5 i	119
Computer and electronic products	334	12,418	63	1,211	11,144
Semiconductor and other electronic components	3344	1,294	28	99	1,167
Navigational, measuring, electromedical, and control instruments	3345	129	4	8	117
Other computer and electronic products	other 334	10,995	31	1,104	9,860
Electrical equipment, appliances, and components	335	111	*	2	108
Transportation equipment	336	104	9	6	88
Aerospace products and parts	3364	16	2	2	13
Other transportation	other 336	87	7	5	75
Furniture and related products	337	6	0	5	1
Miscellaneous manufacturing	322, 324, 339	490	30	75	385
Nonmanufacturing industries	21-23, 42-81	7,414	116	638 i	6,660
Information	51	4,165	i 30	358 i	3,777
Publishing	511	803	4	331 i	467
Telecommunications	517	24	1	2	21
Data processing, hosting, and related services	518	182	8	12	162
Other information	other 51	3,156	i 17	12	3,127
Professional, scientific, and technical services	54	669	7	181	481
Architectural, engineering, and related services	5413	29	1	12	17
Computer systems design and related services	5415	54	5	22	27
Scientific research and development services	5417	16	1	1	13
Research and development in biotechnology	541711	0	0	0	0

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Domestic R&D paid for by the company's foreign subsidiaries and performed by the company, by type of R&D, industry, and company size: 2018 (Millions of U.S. dollars)

			Basic	Applied	
Industry and company size	NAICS code	Total ^a	researchb		Development ^b
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	16	1	1	13
Research and development in the social sciences and humanities	541720	0	0	0	0
Other professional, scientific, and technical services	other 54	570	1	145	424
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	2,580	78	99 i	2,402
All companies (number of domestic employees)	_	23,515	553	2,330	20,632
Small companies					
10-19 ^c	_	21	2	3	16
20-49	_	649	9	204	436
Medium companies					
50-99	_	140	2	48 i	89
100-249	_	463	101	37	326
Large companies					
250-499	_	352	15 i	34	303
500-999	_	798	36	48	715
1,000-4,999	_	2,016	55	501 i	1,461
5,000-9,999	_	1,926	i 4	140 i	1,783 i
10,000-24,999	_	4,533	i 86	122 i	4,325 i
25,000 or more	_	12,617	245	1,193	11,179

^{* =} amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.

^a Statistics are based on companies in the United States that reported to the survey. No systematic item imputation was applied. These statistics include an adjustment to the weight to account for unit nonresponse.

b Respondent was not asked to report categorical breakouts of research and development paid for by foreign subsidiaries. Rather, ratios of the company's basic research, applied research, and development were calculated as proportions of the overall domestic R&D performance paid for by the company. These ratios were applied to the company's domestic R&D performance paid for by foreign subsidiaries to get estimates of a company's basic research, applied research, and development paid for by foreign subsidiaries.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.